SEQUENCE LISTING

<110> Grappin, Philippe
        Oge, Laurent
        Bove, Jerome

<120> USE OF L-ISOASPARTYL METHYLTRANSFERASE AS LONGEVITY MARKER IN
        SEEDS

<130> 291135USOPCT

<140> US 10/580,712
<141> 2006-12-19

<150> PCT/FR04/03042
<151> 2004-11-26

<150> FR 0313858
<151> 2003-11-26

<160> 17

<170> PatentIn version 3.3

<210> 1
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Peptide

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Xaa = E, V or S

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Xaa = A or E

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Xaa = R, G or Q

<400> 1

Arg Tyr Val Pro Leu Thr Ser Arg Xaa Xaa Gln Leu Xaa
1   5   10

<210> 2
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Peptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = D or E

```
<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = Q or K

<220>
<221>   MISC_FEATURE
<222>   (6)..(6)
<223>   Xaa = V or I

<220>
<221>   MISC_FEATURE
<222>   (9)..(9)
<223>   Xaa = N or S

<220>
<221>   MISC_FEATURE
<222>   (10)..(10)
<223>   Xaa = S, E or A

<220>
<221>   MISC_FEATURE
<222>   (14)..(14)
<223>   Xaa = I, V, T or a peptide bond

<220>
<221>   MISC_FEATURE
<222>   (15)..(15)
<223>   If the amino acid in position 14 is I, Xaa = S; If the amino acid in
position 14 is V, Xaa = S or T; If the amino acid in position 14 is T, Xaa = S ;
if position 14 is a peptide bond, Xaa is not present.

<220>
<221>   MISC_FEATURE
<222>   (16)..(16)
<223>   Xaa = I or V

<220>
<221>   MISC_FEATURE
<222>   (17)..(17)
<223>   Xaa = K, Q or R

<400>   2

Gln Xaa Leu Xaa Val Xaa Asp Lys Xaa Xaa Asp Gly Ser Xaa Xaa Xaa Xaa
1               5                   10              15


<210>   3
<211>   17
<212>   PRT
<213>   Arabidopsis thaliana

<400>   3

Gln Asp Leu Gln Val Val Asp Lys Asn Ser Asp Gly Ser Val Ser Ile
1               5                   10              15


Lys


<210>   4
<211>   15
<212>   PRT
<213>   Arabidopsis thaliana
```

<400> 4

Gln Glu Leu Lys Val Ile Asp Lys Asn Glu Asp Gly Ser Ile Lys
1   5   10   15

<210> 5
<211> 13
<212> PRT
<213> Arabidopsis thaliana

<400> 5

Arg Tyr Val Pro Leu Thr Ser Arg Glu Ala Gln Leu Arg
1   5   10

<210> 6
<211> 13
<212> PRT
<213> Arabidopsis thaliana

<400> 6

Arg Tyr Val Pro Leu Thr Ser Arg Val Glu Gln Leu Gly
1   5   10

<210> 7
<211> 13
<212> PRT
<213> Arabidopsis thaliana

<400> 7

Arg Tyr Val Pro Leu Thr Ser Arg Ser Ala Gln Leu Gln
1   5   10

<210> 8
<211> 17
<212> PRT
<213> Arabidopsis thaliana

<400> 8

Gln Asp Leu Gln Val Ile Asp Lys Ser Ala Asp Gly Ser Thr Ser Val
1   5   10   15

Arg

<210> 9
<211> 17
<212> PRT
<213> Arabidopsis thaliana

<400> 9

Gln Glu Leu Gln Val Val Asp Lys Asn Ala Asp Gly Ser Val Thr Val
1   5   10   15

Gln

<210> 10
<211> 8
<212> PRT
<213> Arabidopsis thaliana

<400> 10

Arg Tyr Val Pro Leu Thr Ser Arg
1   5

<210> 11
<211> 12
<212> PRT
<213> Arabidopsis thaliana

<400> 11

Arg Tyr Val Pro Leu Thr Ser Arg Glu Ala Gln Leu
1   5   10

<210> 12
<211> 15
<212> PRT
<213> Arabidopsis thaliana

<400> 12

Arg Tyr Val Pro Leu Thr Ser Arg Glu Ala Gln Leu Arg Gly Asp
1   5   10   15

<210> 13
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA

<400> 13
gctatggagg ctgtggatag agg   23

<210> 14
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA

<400> 14
tcagtcccct ctcagctgcg c   21

<210> 15
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA

<400> 15
ggaccgggta cttaactgct t   21

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA

<400> 16
ttggcggcac ccttagctgg atca   24

<210> 17
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA

<400> 17
atgccccagg acatcgtgat ttcat   25